

Remarks

Claims 1-44, 46-48, 50, 51, 53, and 55-57 are pending in the above-identified patent application. With this Response, claims 1, 27, 29-35, 53, and 56 are amended; claims 2, 21, 55, and 57 are canceled; and new claim 58 is added. Upon entry of the current amendments, claims 1, 3-20, 22-44, 46-48, 50, 51, 53, 56, and 58 are pending. No fee is believed to be due for adding new independent claim 58 because independent claim 57 was previously paid for and is canceled with this response. However, if any fee is due for adding new claim 58 please charge Kagan Binder Deposit Account No. 50-1775 and notify us of the same.

Applicant submits that the claim amendments are fully supported by the application as originally filed and that such amendments do not present new matter.

Support for the amendments to independent claims 1, 27, 29, 35, and 53, and the added new claim 58 is discussed below. Support for the amendment to claim 56 can be found in the specification as originally filed at, e.g., page 4, lines 21 and 22. Claims 30-34 are amended for matters of form.

Applicant respectfully requests reconsideration and further examination of the application in view of the amendments above and remarks below.

Claim Rejections Under 35 U.S.C. §103

Claims 1-44, 46-48, 50, 51, 53, and 55-57 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kuechle et al. (U.S. Pat. No. 6,436,458) in view of Gulstad et al. (U.S. Pat. No. 3,767,421).

Applicant respectfully submits that the amendments to each of independent claims 1, 27, 29, 35, and 53, render this rejection moot. Each of these independent claims, as amended, is briefly discussed below.

Claim 1

With this Response, claim 1 is amended to recite that “the dough composition when stored at refrigerator conditions for a time-period of at least 12 weeks, is capable of exhibiting the following properties” the limit on expansion feature already recited and the additionally featured property of “the dough composition has a raw specific volume from about 0.9 to about 1.3 cubic centimeters per gram, and when baked, has a baked specific volume of at least about

2.5 cubic centimeters per gram.” Support for these amendments can be found in the specification as originally filed at, e.g., page 4, lines 21 and 22, and page 10, lines 6-9 and 19-21. Accordingly, in brief, amended claim 1 includes a refrigerated dough composition specifically having both a particular encapsulated basic active ingredient and a particular non-encapsulated acidic active ingredient such that when the refrigerated dough composition is stored at refrigerator conditions for a time-period of at least 12 weeks, the dough exhibits the advantageous properties of experiencing less than 35 percent expansion during a time period that includes refrigerated storage and having a raw specific volume from about 0.9 to about 1.3 cc/g, yet is still capable of being baked to a baked specific volume of at least about 2.5 cc/g. The raw specific volume and limit on dough expansion after 12 weeks at refrigerated conditions featured in claim 1 reflects the result of being able to successfully separate the encapsulated basic active ingredient from the non-encapsulated acidic active ingredient so as to prevent reaction between the two during refrigerated storage. The baked specific volume feature of claim 1 reflects the unique ability to still be able to bake the dough to a baked specific volume of at least about 2.5 cc/g even though the dough had a raw specific dough volume of from about 0.9 to about 1.3 cc/g after being stored for at least 12 weeks at refrigerated conditions with less than 35 percent expansion, as discussed above. In other words, the leavening reaction of basic active ingredient and acidic active ingredient during baking is not unduly inhibited such that the dough would not be able to bake to a desired baked specific volume of at least about 2.5 cc/g even though such leavening reaction is successfully inhibited during refrigerated storage to a significantly high level.

The Kuechle et al. reference does not teach a dough composition that specifically includes the encapsulated base and non-encapsulated acid according to claim 1 such that a dough can exhibit the unique claimed properties of limited dough expansion and raw specific volume after at least 12 weeks of refrigerated storage, yet still be able to bake to the claimed baked specific volume. Kuechle et al. merely discuss chemical leavening systems in a general sense. Kuechle et al. generally list basic and acidic leavening agents, the list including and not distinguishing between relatively fast-acting (e.g., MCP) and relatively slow-acting (e.g., SALP) acidic leavening agents (see col. 8, lines 8-27). Kuechle et al. also generally mention that encapsulating at least a portion of the leavening system can delay the reaction between acidic and basic leavening agents (see col. 8, lines 28-54). But, Kuechle et al. do not teach the

specifically claimed leavening ingredients to achieve the unique properties recited in claim 1 (discussed above).

In addition, Kuechle et al. do not motivate or suggest the subject matter of claim 1. Kuechle et al. do not even discuss storing a dough at refrigerated conditions for at least 12 weeks and/or how raw specific volume values, baked specific volume values, or dough expansion during such storage could be controlled via the leavening system. Indeed, Kuechle et al. generally describe that their chemically leavened dough can only be stored at refrigerator conditions up to about seven days before the leavening system fails (see Kuechle et al. at col. 3, lines 22-33; col. 7, lines 5-12; and col. 8, lines 28-33).

The Gulstad et al. reference fails to cure the deficiencies of the Kuechle et al. reference. That is, the Gulstad et al. reference fails to teach that the Kuechle et al. reference can be modified specifically with an encapsulated base and a non-encapsulated acid having low solubility according to claim 1 that would result in the specifically claimed properties in claim 1. Gulstad et al. first describe that leavening can be delayed until cooking by either using both acidic and basic ingredients that are nominally active at room temperature (i.e., both non-encapsulated acid and base) or by encapsulating both the acidic and basic ingredients (see Gulstad et al. at col. 3, line 54 to col. 4, line 26, especially col. 3, lines 57-62). Gulstad et al. do go on to briefly mention that “[t]he acidifier and carbonate or bicarbonate salt can be encapsulated together or individually or only the carbonate salt or only the acidifier can be encapsulated.” (See Gulstad et al. at col. 4, lines 26-29). However, Gulstad et al. do not unambiguously disclose using an encapsulated base with a non-encapsulated acid having the low solubility according to claim 1. Indeed, Gulstad et al. mention that encapsulation permits selection from a wider range of acidifiers (see Gulstad et al. at col. 4, lines 7-10).

In addition, Gulstad et al. do not motivate or suggest modifying Kuechle et al. by specifically using an encapsulated base and a non-encapsulated acid having low solubility according to claim 1. As mentioned, Gulstad et al. first describe that leavening can be delayed until cooking by either using both acidic and basic ingredients that are nominally active at room temperature (i.e., both acid and base non-encapsulated) or by encapsulating both the acidic and basic ingredients. Notably, the chemically leavened dough examples in the Gulstad et al. reference include either 1) both non-encapsulated base and non-encapsulated acid (Example IV) or 2) both encapsulated base and encapsulated acid (Examples V-VII).

Although, as also mentioned above, Gulstad et al. do mention that either only the base or acid can be encapsulated, Gulstad et al. do not unambiguously disclose using an encapsulated base with a non-encapsulated acid having the low solubility according to claim 1.

Accordingly, one of skill in the art would not have been motivated to modify Kuechle et al. with Gulstad et al. to specifically use the encapsulated base and non-encapsulated acid according to claim 1 that would have resulted in a dough having the unique properties according to claim 1 of limited dough expansion and raw specific volume after at least 12 weeks of refrigerated storage, yet still being able to bake to the claimed baked specific volume.

Claim 27, 29, 35, and 53

With this Response, claim 27 is amended to specifically recite an “encapsulated basic active ingredient”, a “non-encapsulated acidic active ingredient is selected to have relatively low solubility in the dough composition below baking temperature and to be substantially soluble in the bulk dough composition during baking”, and the additional property of “the dough composition when stored at refrigerator conditions for a time-period of at least 12 weeks, has a raw specific volume from about 0.9 to about 1.3 cubic centimeters per gram, and when baked, has a baked specific volume of at least about 2.5 cubic centimeters per gram.” Support for these amendments can be found in the specification as originally filed at, e.g., page 4, lines 21 and 22; page 9, lines 11-20; and page 10, lines 6-9 and 19-21.

With this Response, claim 29 is amended to specifically recite the property of “the dough composition when stored at refrigerator conditions for a time-period of at least 12 weeks, has a raw specific volume from about 0.9 to about 1.3 cubic centimeters per gram, and when baked, has a baked specific volume of at least about 2.5 cubic centimeters per gram.” Support for this amendment can be found in the specification as originally filed at, e.g., page 4, lines 21 and 22, and page 10, lines 6-9 and 19-2.

With this Response, claims 35 and 53 are amended to each specifically recite the properties of “such that the dough composition has a raw specific volume from about 0.9 to about 1.3 cubic centimeters per gram after the refrigerating step” and “so as to provide a baked specific volume of at least about 2.5 cubic centimeters per gram.” Support for these amendments can be found in the specification as originally filed at, e.g., page 4, lines 21 and 22, and page 10, lines 6-9 and 19-2.

For one or more reasons similar to those discussed above with respect to claim 1, it is respectfully submitted that the Kuechle et al. reference and the Gulstad et al. reference, alone or in combination, do not teach, motivate, or suggest the subject matter of amended claims 27, 29, 35, and 53.

Accordingly, it is respectfully requested that the rejection of claims 1-44, 46-48, 50, 51, 53, and 55-57 under 35 U.S.C. §103(a) as being unpatentable over Kuechle et al. in view of Gulstad et al. be withdrawn.

Added Claim 58

Support for added new claim 58 can be found in the specification as originally filed at, e.g., page 2, lines 17-27; page 9, lines 11-20; page 9, line 30 to page 10, line 2; page 10, lines 6-9 and 19-21; and page 25, lines 1-18.

For one or more reasons similar to those discussed above with respect to claim 1, it is respectfully submitted that the Kuechle et al. reference and the Gulstad et al. reference, alone or in combination, do not teach, motivate, or suggest the subject matter of new claim 58.

Conclusion

In view of the above-mentioned amendments and remarks, it is respectfully submitted that the above-identified application is now in condition for allowance. The Examiner is invited to contact the undersigned, at the Examiner's convenience, should the Examiner have any questions regarding this communication or the present patent application.

Respectfully Submitted,

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